

ABSTRACT

A charge pump circuit (2, 7, 8) included in a clock synchronizer according to the present invention is capable of preventing occurrence of an offset even though an output potential (VC) of a loop filter (9) is varied, and includes a control circuit (7, 8) controlling a gate potential (VCP, VCN) of a transistor (3, 6) such that predetermined constant current flows through the transistor (3, 6) connected between the line of a power-supply potential (VCC, GND) and an output node of the loop filter (9) by a switching circuit (4, 5), based on the output potential (VC) of the loop filter (9).